

a body having at least one surface; and
 an active material in operative communication with the at least one surface, wherein the active material is configured to undergo a change in a property upon receipt of an activation signal, wherein the change in a property is effective to change a texture of the at least one surface.

2. The device of claim 1, wherein the active material comprises a shape memory polymer, a shape memory alloy, a ferromagnetic shape memory alloy, an electroactive polymer, a piezoelectric material, a magnetorheological elastomer, an electrorheological elastomer, an electrostrictive material, a magnetostrictive material, or a combination comprising at least one of the foregoing active materials.

3. The device of claim 1, wherein the change in the property comprises a dimensional change, a shape change, an orientation change, a flexural modulus change, an elastic modulus change, or combinations comprising at least one of the foregoing properties.

4. The device of claim 1, wherein the activation signal comprises a thermal activation signal, an electric activation signal, a magnetic activation signal, a chemical activation signal, a mechanical load, or a combination comprising at least one of the foregoing activation signals.

5. The device of claim 1, further comprising an activation device configured to provide the activation signal to the active material.

6. The device of claim 1, wherein the change in the texture of the at least one surface is effective to change an airflow boundary layer across the surface.

7. The device of claim 1, wherein the change in the texture of the at least one surface is effective to change a frictional coefficient between the surface and a contacting body.

8. The device of claim 1, wherein the change in the texture of the at least one surface is effective to provide a haptic signal.

9. The device of claim 1, wherein the change in the texture of the at least one surface is effective to reduce noise generated by a fluid flow over the at least one surface.

10. The device of claim 1, wherein the change in the texture of the at least one surface is effective to reduce glare on the at least one surface.

11. The device of claim 1, wherein the change in the texture of the at least one surface is effective to scatter and thus reduce sound reflected from the at least one surface.

12. The device of claim 1, wherein the change in the texture of the at least one surface is effective to separate and remove coatings, deposits, contaminants, and combinations comprising at least one of the foregoing from the at least one surface.

13. The device of claim 1, wherein the change in the texture of the at least one surface is effective to indicate the exposure

of the at least one surface to a selected one or both of a temperature and magnetic field above a predetermined level.

14. The device of claim 1, wherein the change in the texture of the at least one surface is effective to reduce the contact between the at least one surface and a second surface to permit gas and/or liquid flow through an interface between the at least one surface and the second surface.

15. The device of claim 1, wherein the change in the texture of the at least one surface is effective to change the visual appearance of the at least one surface, wherein the change in the visual appearance is a transition between a smooth finish and a matte finish, an induction of a texturing pattern, and combinations comprising at least one of the foregoing.

16. The device of claim 1, wherein the body further comprises: a first layer comprising the active material, wherein the first layer is configured to change from a first thickness to a second thickness when the active material undergoes the change in a property, wherein the change in thickness is effective to raise and/or lower a surface texture.

17. A method for selectively controlling and varying surface texture, comprising:

providing a body having at least one surface and an active material configured to undergo a change in a property upon receipt of an activation signal, wherein the change in a property is effective to change a texture of the at least one surface; and

applying the activation signal to the active material and causing the change in the property of the active material, wherein the active material is in operative communication with the at least one surface and texturing the at least one surface with the change in the property of the active material.

18. The method of claim 16, further comprising discontinuing the activation signal and reversing the change in the texture of the at least one surface.

19. The method of claim 16, wherein the active material comprises a shape memory polymer, a shape memory alloy, a ferromagnetic shape memory alloy, an electroactive polymer, a piezoelectric material, a magnetorheological elastomer, an electrorheological elastomer, an electrostrictive, a magnetostrictive, or a combination comprising at least one of the foregoing active materials.

20. The method of claim 16, wherein the change in the property comprises a dimensional change, a shape change, an orientation change, a flexural modulus change, an elastic modulus change, or combinations comprising at least one of the foregoing properties.

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